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Facilities Engineering

Project Definition and Work Classification

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SUMMARY of CHANGE

DA PAM 420-11

Project Definition and Work Classification

This new pamphlet--

- o Extracts work classification guidance that was contained in DA PAM 420-8, chapter 9, and project information that was in AR 420-17 and consolidates the information into a new pamphlet (Chapters 1, 2, and 3).
- o Updates the terminology used throughout the document (Chapters 1, 2, and 3).
- o Expands the number of work classification examples in the grounds area (Para 2-3).
- o Clarifies the example governing the paving and stabilization of unpaved drainage channels (para 2-2b(2), Example D).
- o Adds to the examples of work classification to include work involved in asbestos abatement (para 2-6).
- o Adds to the examples of work classification to include the work involved in the Defense Environmental Restoration Program (DERP) (para 2-7).
- o Expands the examples of work classification in the utilities area (para 2-4).
- o Adds to the examples of work classification to include work associated with landfill operations (para 2-5).
- o Adds guidance governing the classification of work associated with installing equipment into existing facilities (para 2-8).
- o Adds a paragraph on how to calculate the facility replacement value (para 3-4).

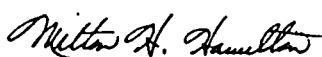
Facilities Engineering

Project Definition and Work Classification

By Order of the Secretary of the Army:

GORDON R. SULLIVAN
General, United States Army
Chief of Staff

Official:



MILTON H. HAMILTON
Administrative Assistant to the
Secretary of the Army

History. This UPDATE printing publishes a new DA pamphlet.

Summary. This pamphlet provides guidance to Army installations in the areas of project definition and performance of work classification. Procedures are explained to promote

uniform interpretation on the classification of work Army wide.

Applicability. This pamphlet applies to the Active Army, the Army National Guard, and the U.S. Army Reserve. It applies to all active Army installations, subinstallations, and assigned activities, and includes Government-Owned Contractor-Operated (GOCO) facilities.

Proponent and exception authority. The proponent of this regulation is the Assistant Chief of Staff for Installation Management (DAIM). The proponent has the authority to approve exceptions to this regulation that are consistent with controlling law and regulation. Proponent may delegate the approval authority in writing to a division chief under their supervision within the proponent agency who holds the grade of colonel or the civilian equivalent.

Interim changes. Interim changes to this pamphlet are not official unless they are authenticated by the Administrative Assistant to the Secretary of the Army. Users will destroy

interim changes on their expiration dates unless sooner superseded or rescinded.

Suggested Improvements. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to Assistant Chief of Staff for Installation Management, Attn: DAIM-FDF-B, 7701 Telegraph Road, Alexandria, VA 22315-3800.

Supplementation. Supplementation of this pamphlet is prohibited without prior written approval from the Assistant Chief of Staff for Installation Management, Attn: DAIM-FDF-B, 7701 Telegraph Road, Alexandria, VA 22315-3800.

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Contents (Listed by paragraph and page number)

Chapter 1

Introduction, page 1

Section I

General, page 1

Purpose • 1-1, page 1

References • 1-2, page 1

Explanation of Abbreviations and Terms • 1-3, page 1

Section II

Work Classification Concepts, page 1

General • 1-4, page 1

Why Work Classification is Important • 1-5, page 1

Definitions • 1-6, page 1

Work Classification Applications • 1-7, page 2

Chapter 2

Work Classification Examples, page 4

General • 2-1, page 4

Work classification — Buildings and Roads • 2-2, page 4

Work Classification — Grounds • 2-3, page 5

Work Classification — Utilities • 2-4, page 6

Work Classification — Landfills • 2-5, page 7

Work Classification — Asbestos • 2-6, page 7

Work Classification — Defense Environmental Restoration Program (DERP) • 2-7, page 7

Work Classification — Equipment Classification • 2-8, page 8

Chapter 3

Project Documentation, page 10

General • 3-1, page 10

Establishment of Official Project Files • 3-2, page 10

Integrated Undertaking • 3-3, page 11

Facility Replacement Value • 3-4, page 11

Safeguarding Information • 3-5, page 11

Appendixes

A. References, page 12

B. Tables, page 13

Table List

Table 3-1: Blotter Record, page 11

Table B-1: Steps in Development of a Project or Projects, page 13

Table B-2: Outline of Work Classification, page 13

Glossary

Index

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Chapter 1 Introduction

Section I General

1-1. Purpose

AR 420-10 identifies the Director of Engineering and Housing (DEH) or Director of Public Works (DPW) as the installation staff officer responsible for work classification and contains basic work classification policy and guidance. This pamphlet is intended to promote uniform interpretation on the classification of work Army wide by presenting examples of maintenance, repair, and minor construction projects and policy and guidance governing the classification of work.

1-2. References

Required and related references are listed in Appendix A.

1-3. Explanation of Abbreviations and Terms

Abbreviations and terms used in this pamphlet are explained in the glossary.

Section II Work Classification Concepts

1-4. General

Real property facility projects include maintenance, repair, construction, demolition, restoration, and similar undertakings. Real property facility projects constitute the basis for essentially all of the facilities engineer activities. The management of real property facility projects is one of the most critical duties of the facilities engineer. Because of the large amount of funds utilized in facilities engineering operations, the complexity of the work, and the size of the workforce, the DPW is constantly required to interpret various regulatory restrictions on the utilization of funds and personnel. Many of these restrictions are in the form of statutory limitations enacted by the Congress, while other restrictions are regulatory or administrative in nature. Moreover, the determination of the proper source of appropriated funds to use on a specific project is governed by statutory and regulatory restraints and is subject to legal review. In any case, violations of these rigid statutory and regulatory limitations are a serious offense. Therefore, a clear distinction must be made between maintenance, repair, and construction work. Maintenance and repair are defined in AR 420-10 and minor construction is defined in AR 415-35. Construction for family housing, including incidental improvements and line item improvements, is defined in AR 210-50. Work accomplished by troops on real property facilities will be in accordance with the policies of AR 420-10 (para 5-3) and AR 570-4 (para 5-10 and 5-19). Work classification definitions and rules apply to all facilities engineering work, regardless of who performs it and how it is funded.

1-5. Why Work Classification is Important

a. While the current definition of a minor construction project in AR 415-35 (and as stated in para 1-6c below) appears simple in concept, its application is often difficult. Misclassification of construction as maintenance or repair and errors in defining minor construction projects may result in a statutory violation of the Anti-Deficiency Act (see AR 37-1).

b. Antideficiency statutes state that any officer or employee of the United States who commits governmental funds which have not been appropriated is in violation of antideficiency statutes is subject to appropriate administrative discipline, including suspension from duty without pay or removal (31 USC 1349 and 1518). Those convicted of a knowing and willful violation may be fined not more than \$5,000 or imprisoned for not more than 2 years, or both (31 USC 1350 and 1519).

c. Antideficiency violations are serious and affect the Army's credibility. Department of Defense and Department of Army policy calls for disciplinary action in antideficiency violation cases. The

fact that a violation was not willful only means that it did not constitute a crime, not that it does not warrant disciplinary action. Circumstances such as "a heavy workload at year-end" or an employee's "past exemplary record" generally are relevant only in determining the appropriate level of discipline, not in determining whether discipline should be imposed. In view of this, care must be taken to ensure that the Army does not violate the Antideficiency Act. DPWs are encouraged to seek guidance from their Major Commands (MACOM) or the Center for Public Works (CECPW-EP) on questionable rulings.

1-6. Definitions

a. Maintenance. Maintenance is the work required to preserve and maintain a real property facility (RPF) in such condition that it may be effectively used for its designated functional purpose. Maintenance includes cyclic work done to prevent damage which would be more costly to restore than to prevent. Maintenance includes work to sustain components. Examples include renewal of disposable filters, painting, caulking, refastening loose siding and sealing bituminous pavements. Painting done in connection with repair work (i.e., as a result of the repairs) is properly classified as repair.

b. Repair. The restoration of a RPF to such condition that it may effectively be used for its designated functional purpose. Repair may be overhaul, reprocessing, or replacement of deteriorated component parts or materials.

(1) Correction of deficiencies in failed or failing components of existing facilities or systems to meet current Army standards and codes where such work, for reasons of economy, should be done concurrently with restoration of failed or failing components. Corrective work may involve incidental increases in quantities or capacities.

(2) A utility system or component may be considered "failing" if it is energy inefficient, or technologically obsolete, provided:

(a) The utility system or component of such a system exists and is, in fact, energy inefficient or technologically obsolete.

(b) The system/component to be replaced has been in service for a minimum of 3 years.

(c) The project is estimated to have a payback period of 10 years or less.

(3) Major work (e.g., Building interior gutting and replacement) required to restore a generally deteriorated facility to such a condition that it may be effectively used for its designated purpose.

(a) Such an undertaking may include, under the classification of repair, the relocation or reconfiguration of building components such as partitions, windows, and doors, to the extent that they are replacements of existing components. Additional quantities, beyond what existed, is construction.

(b) Such an undertaking may include, under the classification of repair, the relocation and reconfiguration of utility systems into arrangements to meet current standards and current code requirements to the extent that the total area or population served by the utility system being replaced is not increased. An increase in total area or population served is construction.

(c) In case of failed or failing systems, such an undertaking may also incorporate additional components, if based on good engineering practice and to meet current code requirements, to permit the efficient and safe use of the replacement system.

(4) Repair does not include increases in quantities of components for functional reasons, nor extension of utilities or protective systems to areas not previously served. An increase in quantities of components for functional reasons, areas not previously served by utilities or protective systems, or increases in exterior building dimensions, is construction.

(5) Complete replacement of a RPF is Construction, not repair. (See para 1-7j. for further guidance).

c. Construction. (Note: Construction projects greater than \$300,000 must be funded from the Military Construction Appropriation).

(1) The erection, installation, or assembly of a new facility.

(2) The addition, expansion, extension, alteration, conversion (in the sense of facility modification caused by a change in facility utilization), or complete replacement of an existing facility.

- (3) The relocation of a facility from one installation to another.
- (4) Installed building equipment made a part of the facility.
- (5) Related site preparation, excavation, filling, landscaping or other land improvements.
- (6) Foundations, site work and utility work associated with the setup of relocatable buildings, IAW AR 420-18.

1-7. Work Classification Applications

All actions must be based on good faith, sound judgment and conformance with all regulatory requirements and limitations, e.g., AR 415-35, AR 420-10 and AR 210-50. The decision making process should be supported by clear explanations in the project file. When doubt exists, clarification should be requested from the MACOM or the USACPW (CECPW-EP).

a. There are two principal considerations when performing work classification determinations.

(1) Strict adherence to the prohibition against incrementing or fragmenting construction for the purpose of circumventing approval authority limitations.

(2) An honest assessment of what constitutes a "complete" and "usable" facility(ies) or a "complete" and "usable" improvement to existing facility(ies). Consider the following examples:

(a) *Example A.* An airfield exists and is in use. There are concurrent requirements for a new control tower and an addition to the hangar. Each is properly a separate project, since each is independently "complete and usable" upon completion.

(b) *Example B.* A new airfield is to be constructed where none now exists. Assume the requirements for the airfield consists of a control tower, hangar, landing strip and taxiways. Classification of each facility as a separate project would be improper. While each may be "complete," such interrelated facilities are not, in fact, independently "usable".

(c) *Example C.* An administrative building exists and is in use. There are concurrent but unrelated alteration requirements in the basement's mechanical room and in the headquarters area of the facility. Each is properly a separate project, since each is independently "complete and usable" upon completion.

(d) *Example D.* A new commissary is to be established at an installation where none now exists. The installation is planning on using three existing vacant collocated buildings and the surrounding paved area for parking. The three buildings and parking area require repairs and improvements in order to convert the buildings into a complete and usable commissary facility. Classification of each building as a separate project would be improper. While each may be "complete", such interrelated facilities are not, in fact, independently "usable" until all four components of the commissary are completed, i.e., the sales store, the dry storage, the cold storage and the parking lot. In this case one repair and one associated minor construction project should be developed and approved for all work needed to establish a commissary.

b. The guidance in AR 420-10 defining a maintenance or a repair "project" is more general than the definition of construction in AR 415-35. A maintenance or repair project is defined in part by AR 420-10 as a "single undertaking" (i.e., an activity which would be readily and separately identified as a logical task). A single undertaking could range from repairing one block in a sidewalk to all work required to repair a building. Its scope is dependent upon need for accomplishment, economical contracting practice, and good engineering judgment. Also, the scope may be limited by fund availability. However, when a finite project is to be funded (phased) over a number of years the entire project must be approved at one time. Project scope must be based on reason or logic that could not in any way be interpreted as intending to circumvent dollar approval levels. Repair projects are further defined as involving "a finite scope". This could be repairing only the deteriorated wallboard in one building or repairing many items. If many items are of equal priority in the same facility, and good engineering judgment indicates that they should be accomplished simultaneously, they should be considered as a single undertaking of finite scope and therefore

one project. However, when maintenance, repair, and minor construction are to be done at the same time, maintenance, repair, and minor construction work may be treated as three separate projects (See table B-1).

c. The definition of an individual repair project in AR 420-10 contains the phrase, "one or more real property facilities". Therefore, only one real property facility need be included in the scope of a project. On the other hand, two or more real property facilities may be included in a project if they fit the term "single undertaking" and for repair, "finite scope". Following the general criteria outlined above, the facility engineer examines the particular case and determines the scope of a project based on:

- (1) Good engineering practices.
- (2) Operational or administration considerations.
- (3) Economical contracting practices.
- (4) Rules applicable to family housing.

d. An analysis of work classification and project scope is essential in determining project approval level and adhering to statutory and regulatory requirements and limitations. The scope of a contract may include one or more projects or one project may be divided into several contracts. Project approval levels do not apply insofar as the packaging of contracts is concerned. A contract scope must be determined on the basis of good engineering principles, operational and administrative considerations, and contracting practices which are in the best interest of the government.

e. The availability of funds does not affect approval levels or what must be combined into a project. Additionally the type or source of funds does not effect the work classification rules or project scope determinations; however approving officials must consider limitations when other than OMA funds are being used. Similar type repair work need not be combined into a single project or a repair project need not satisfy a total requirement. Maintenance or repair projects which are single undertakings, of finite scope, and/or satisfy specific requirements, may stand alone. Work must not, however, be divided into a number of projects solely to keep the projects within an approval authority.

f. Repair means that the facility or facility component has failed, or is in the incipient stages of failing or is no longer performing the functions for which it was designated. Repair may sometimes include work which under other circumstances would be considered as construction. For example, a partition relocated to provide a better interior arrangement would be an alteration (construction). The same partition, if relocated to provide clearance for a replacement of a failed or failing heating system of different physical dimensions, would be properly classified as repair, even if the wall itself did not need repair. (See table B-2).

g. Repair also means that something exists which needs to be repaired or restored and that major upgrading does not result. For example, replacing a leaking 4-gallon fire extinguisher with an automatic sprinkler system is not repair. Neither is replacing a long deteriorating electrical extension cord with conductors in conduit considered repair or replacing a deteriorated ceiling-mounted light fixture with a chandelier.

h. In the case of component replacement, the above does not require that repairs must be in kind nor does it preclude use of improved materials, equipment, methods, or arrangements. As a matter of general policy, energy and water saving materials should be used in repair projects whenever feasible. An economic analysis should be a routine decision making tool in the selection of materials or methods of maintenance and repair. As part of repair, constituent utilities systems that need to be replaced within a facility (e.g., electrical, plumbing, heating and ventilation categorized as installed building equipment) may be increased in capacity to accommodate accumulated normal growth or to meet current codes or modern accepted engineering standards. For example, a failing air conditioning system within an existing facility may be replaced with a larger system sized to meet the existing cooling loads of the facility, as long as all areas were previously air conditioned.

i. Standards change, and the Army will comply with current practices and codes. An existing incandescent street light that is destroyed by accident, nature, or has failed to the point of requiring

complete replacement, may be replaced with some more modern type, such as mercury vapor, sodium vapor (high or low pressure), or high-intensity-discharge street light. A broken 4-inch sewer line may be replaced with a 6-inch line as the latter size is the current minimum standard permitted. However, replacement of a sewer line in good condition with a larger size to provide additional capacity to serve a new proposed facility would be construction.

j. Complete replacement of a facility is construction. Partial replacement may be repair as long as the replaced components are failed or deteriorating and as long as the facility is not being completely replaced. For work classification purposes, a Real Property Facility (RPF) is a separate and individual building, structure, utility system, or other real property improvement identifiable in the three-digit Category Codes listed in AR 415-28. Examples are as follows:

(1) *Buildings.* One enlisted personnel barracks (Category Code 721) represents a single RPF. A barracks facility damaged by fire may be repaired if the foundation and walls still exist, and do not require total replacement.

(2) *Utilities.* A single (physically or geographically identifiable) water supply, treatment, and storage facility (Category Code 841) represents a single RPF. Items such as failing wells or water storage tanks may be completely replaced as repair since they are considered component parts of a RPF.

(3) *Surfaced Areas.* All the real property improvements listed under the three digit category codes 851 (roads) or 852 (sidewalks and other pavement) are a single RPF. All contiguous airfield pavements, i.e., runways, taxiways, aprons, category code 110, represents a single RPF. Failing bridges or airfield runways may be completely replaced as repair since they are considered component parts of a RPF.

k. In the case of major facility restoration, e.g., interior gutting and removal, where building components, such as partitions, windows, doors, or utilities need to be replaced, such work is repair even though replacement items may be installed in a different location or configuration within the building than the original components. This applies to the replacement of utilities or protective systems, when such systems are not extended to areas within the building not previously served. However, an increase in quantities of building components, area served by utilities or protective systems, or exterior building dimensions, is construction.

l. As stated above, repair means that the facility or facility component has failed, or is in the incipient stages of failing. An utility system or utility system component may be considered failed or failing when that item is energy inefficient, or technologically obsolete, has been in service for at least 3 years, and the replacement project has a payback of 10 years or less. Projects that may qualify under technological obsolescence include the following examples:

(1) Projects required to complete the government's portion of Demand Side Management (DSM) agreements with private utility companies.

(a) Replacing T-12 fluorescent lamps (F40T12) and electromagnetic ballast with T-8 fluorescent lamps (F32T8) and electronic ballast.

(b) Replacing incandescent lamps with compact fluorescent lamps.

(c) Replacing motors with premium efficiency motors.

(d) Replacing air conditioning/heat pump units with high SEER equipment.

(2) Replacing boiler chemical shot feeders with proportional feeders (makeup pulsing meter type) for high pressure (less than 15 PSI) and high horsepower (less than 100 HP) steam boilers.

(3) Replacing uncooled boiler water collection lines with sample coolers.

(4) Replacing toilets, faucets and showerheads with low-flow fixtures (1.6 gallons per flush, for toilets; 2.5 GPM for faucets and showerheads).

(5) Replacing boilers/furnaces with high efficiency boilers/furnaces to include modular boiler systems and condensing furnaces.

m. Energy Savings Performance Contracting (ESPC) Guidance.

(1) ESPC is a contracting procedure in which a private contractor evaluates, designs, finances, acquires, installs and maintains energy savings equipment for an agency, and receives compensation based on the performance of that equipment. The conditions of the contract determine the level of compensation to the contractor, with the remainder of the savings retained by the agency. This type of contracting provides an alternative method of implementing energy savings projects, when installation resources such as manpower, technical expertise or funding are not available.

(2) Determination of project viability is based on such factors as utility rates and costs, availability of conservation opportunities, projected building use requirements, ease of performance verification and support of the base contracting, engineering and legal personnel. Typically, large facilities or large groups of facilities with older energy consuming systems (and therefore large utility bills) are good ESPC candidates. A preliminary technical and economic analysis must be conducted to determine if a proposed energy conservation measure has ESPC potential, which will be based on both the agency's ability to achieve a reduction in operating costs, and the contractor's ability to obtain an acceptable return on investment.

(3) Examples of ESPC projects include the following:

(a) *Propane/Air Mixing Plant:* The mixing plant provides the installation with natural gas peak shaving capability. The plant allows the installation to purchase "interruptible gas" in lieu of "firm gas". When the installation natural gas supply is interrupted, propane is mixed with air and piped into the natural gas distribution system. The installation benefits from the cost advantage offered by interruptible gas but is not inconvenienced by the interruptions.

(b) *Lighting retrofit:* Existing inefficient light fixtures are replaced by high efficiency light fixtures. The installation benefits from the lower electrical usage and the reduced maintenance.

(c) *Mechanical Equipment:* Consider a particular piece of mechanical equipment, a large chiller. The government chiller was old and inefficient and the government could not afford to replace it. The contractor replaced the chiller and the government pays the contractor for the chilled water produced by the chiller. The installation benefits from the cost advantage offered by the high efficiency unit and pays the contractor over time, avoiding the large initial capital cost.

n. Minor Construction Prohibitions.

(1) No project will be subdivided in order to reduce costs for purposes of approval.

(2) Planned Phasing of Construction on an existing facility, or a new facility, or in connection with a new or existing interdependent group or complex of facilities is not permissible. "Phasing" is the process of breaking a complete project into sequential tasks such as foundation, superstructure, and finish work. One "phase" is no good without companion "phases" as far as producing a completed project. Phasing has meaning only in reference to the construction sequence or perhaps the funding process. (A single "phase" of a project should never be requested for authorization).

(3) Planned Incremental Construction on an existing facility, or a new facility, or in connection with a new or existing interdependent group or complex of facilities is not permissible. "Incrementing" is the segmenting of a complete project into usable "increments". For example, a project to construct an airfield could be broken into increments of runways, taxiways, aprons, control tower, and hangars, each of which are complete and usable; but the total project is not complete until all increments are complete, and the total requirement is satisfied.

(4) Minor construction authority (10 USC 2805) normally will not be used to begin or complete major construction projects contained in the annual Military Construction Authorization Act. It will not normally be used as a basis to complete projects financed under other authorizations when available funding is lacking. In rare instances, a minor MILCON project may precede a major MILCON project when it meets a specific need during a specific time frame. A minor project may follow a major project when new mission requirements arise following project approval.

(5) The following may constitute a statutory violation and is prohibited.

(a) Planned acquisition or improvement of real property facilities through a series of minor construction projects.

(b) The subdivision of a construction project to reduce costs to a level that meets a statutory limitation or the splitting or incrementing of the costs of a project to reduce costs below an approval threshold.

(c) Development of a minor construction project solely to reduce the cost of an active MILCON project below the level at which Congress would be informed of the cost variation.

(6) Nonappropriated funds (NAF) or private funds may be used with appropriated funds for construction when it can be clearly shown that the construction projects are intended for different purposes. The combination of funding sources is not to be used to increment the project or to circumvent limitations. Construction projects having a total combined cost of \$300,000 or less may be approved by the major command. Construction projects that have a total combined cost in excess of \$300,000 must be submitted to CECPW-EP for review and approval. Separate and identifiable projects having different funding sources may be combined for contracting purposes without prior approval; however, the costs for each type of project must be clearly identifiable (see AR 215-1 and AR 415-19).

(7) Minor construction projects will not be executed for base realignment or closure actions until the terms of the National Environmental Policy Act (PL 91-190) have been met (AR 200-2, chap 2 and AR 415-15).

(8) Any project proposed under minor construction authority that has been previously denied authorization by Congress must be approved by the Secretary of the Army (SA) or his designee regardless of cost.

(9) Project cost limitations (10 USC 2805) in effect at the time of approval of a minor construction project remain in effect throughout the life of the project. Any subsequent change in project cost limitations cannot be applied to previously approved minor construction projects, unless the project is submitted for reapproval.

(10) AR 405-80 describes limitations on expenditures for maintenance, repair, and minor construction for leased facilities.

(11) All work on a minor construction project must be halted as soon as it becomes apparent that the projected total funded cost of a project will exceed the statutory limitation in 10 USC 2805 (c)(1) (currently \$300,000). See AR 415-35 or AR 415-15 for processing procedures for MCA approval and funding in such a case.

Chapter 2 Work Classification Examples

2-1. General

This chapter contains specific examples of maintenance, repair and construction type work. The AR 420 series provides additional work classification guidance for individual facilities and utility systems. For example, AR 420-72 provides additional work classification guidance for surfaced areas, bridges, and railroad trackage.

2-2. Work classification — Buildings and Roads

a. Maintenance.

(1) Buildings:

(a) *Example A.* Elimination of hairline cracks in plaster by grooving out and patching.

(b) *Example B.* Total or partial skin coating of a hairline cracked surface.

(c) *Example C.* Painting of building exterior or interior.

(d) *Example D.* Sanding, sealing, and finishing of wood floors.

(e) *Example E.* Pointing of masonry joints and sealing of masonry walls.

(2) Roads:

(a) *Example A.* Seal coat, asphalt rejuvenation and a single surface treatment of asphalt roads and hard stands.

(b) *Example B.* Cleaning out sediment basins.

(c) *Example C.* Cleaning and sealing of cracks and joints in pavements.

b. Repair.

(1) *Buildings.* In general, deteriorated materials or unserviceable surfaces may be replaced or overlaid under the category of repair. This includes: reroofing; overlay of wood floors in kind, or with hardboard and resilient flooring, or carpeting; repair or overlay of concrete floors with concrete topping, resinous floor coating, ceramic or quarry tile; repair or replacement of windows, doors, screens, siding, trim, skirting, stair treads and risers, railings, ladders, fire escapes, and shelves; repair or replacement of existing wall linings; repair or replacement of wood steps and platforms with concrete; and replacement of sheathing and framing lumber.

(a) *Example A.* The replacement of failing wood trusses or the installation of supplemental trusses, beams or columns to augment the existing failing roof structural system. Note: Significant strengthening of structural systems, specifically to increase the load carrying capacity beyond initial design capacity to accommodate changed usage, is construction.

(b) *Example B.* The replacement of rigid underlayment and application of floor covering in a building to correct failing, unsafe, or unsanitary conditions.

(c) *Example C.* Installation of slip resistant treads or nosings on existing stairs, if stairs are in need of repair.

(d) *Example D.* Installation of fiberglass roof shingles to replace deteriorated roll roofing, if installation is essential to protect the building. (The use of higher quality material is justified to reduce further maintenance costs.)

(e) *Example E.* Installation of prefabricated siding over deteriorated siding or siding which will not economically retain paint. For the latter, replacement of siding must be cost effective with respect to painting over the expected life of the facility. Installation of insulation, where none exists, to meet current criteria would be considered repair if it was accomplished in conjunction with residing or replacement of a wall liner, ceiling or roof. In case of the wall liner or ceiling, these must exist and be in a failed or deteriorated condition, otherwise the installation of only insulation, where none exists, is properly classified as construction. In a similar situation, even though it is proven to be more cost effective to paint building interiors by first covering the unlined ceilings and walls with gypsum board than to paint bare studded walls and exposed trusses, the installation of gypsum board ceiling and painting must be classified as construction.

(f) *Example F.* Replacement of carpeting serving as prime floor finish which is worn to the extent it requires complete replacement.

(g) *Example G.* When windows or doors of nonstandard size need replacement, changing the size of the window or door frame to accommodate standard sizes is repair.

(h) *Example H.* Replacement of failing single glazed window units with double glazed window units may be accomplished as repair in geographical areas where storm windows are authorized and economically justified by energy savings.

(i) *Example I.* Total replastering of deteriorated walls or ceilings is repair.

(j) *Example J.* Replacement of failed venetian blinds with draw shades or vice versa is repair.

(k) *Example K.* Replacement of failed or failing kitchen cabinets is repair. This could include an incidental increase in counter area and cabinet space.

(l) *Example L.* Replacement of a spalling deteriorated ceiling with a suspended ceiling is repair.

(m) *Example M.* During a conversion, overlaying an existing, failing vinyl floor with vinyl or carpet as a prime floor finish, in accordance with current criteria, is repair.

(n) *Example N.* When the restoration of a generally deteriorated building requires replacement of partitions, such replacements do not have to be reinstalled at the original location or in the same configuration to be considered repair. However, the increase in the amount of linear feet of partitions over the amount previously removed is construction.

(2) Roads and Railroads:

(a) *Example A.* Work necessary to restore a pavement to serve its designated purpose including replacement of constituent materials (surface course, base course, subbase, etc.). Asphalt concrete overlays to repair failed or failing pavements may be accomplished to accommodate accumulated normal growth and evolution's in missions, equipment, and facilities; however, an overlay which is used to convert unsurfaced roads or roads with only a surface treatment to an asphaltic concrete surface is construction. Asphalt concrete overlays to increase pavement strength to accommodate a change in mission is construction and may not be accomplished as repair. Restoration of a pavement following deterioration, damage, or failure, which comprises *complete* replacement or reconstruction of the pavement facility, is construction and may not be accomplished as repair.

(b) *Example B.* Replacing road materials such as crushed stone, gravel, sand, or clay, which have been displaced by traffic; addition of materials to reestablish prior grade and cross section; application of a single or double surface treatment to an existing stabilized surface.

(c) *Example C.* Restoring surface smoothness by heating, scarifying, remixing, compacting, and resurfacing.

(d) *Example D.* Paving of the invert of an open drainage ditch, to increase hydraulic efficiency or as an erosion control measure, is repair. When paving sidewalls and the invert concurrently, the entire undertaking is classified as construction. Paving of sidewalls only is construction.

(e) *Example E.* Replacing component parts of damaged pavements appurtenances, rails, and traffic signs and signals.

(f) *Example F.* Repair work required to restore railroads including work necessary to restore trackage to the current standard necessary to ensure safe and efficient operation. Work also includes ballast cleaning, replacement, and/or addition, rail and tie replacement, and reconstruction of failed crossings to current standards.

(g) *Example G.* Work necessary to repair failed or failing storm drainage systems including reshaping, seeding or sodding ditches or channel slopes, and replacing damaged or deteriorated drainage structures.

c. Construction.

(1) *Buildings.* Work pertaining to the conversion (in the sense of facility modification caused by a change in facility utilization), addition, expansion, extension, alteration, or total replacement of a building is classified as construction.

(a) *Example A.* Extensions or additions that increase the overall dimensions.

(b) *Example B.* Provision of new partitions, lining of unlined walls and ceilings, including the necessary painting, and provision of associated insulation.

(c) *Example C.* Relocation of walls, partitions, doors and windows in good condition to permit more effective use of the building.

(d) *Example D.* Alterations in arrangement of utilities within buildings, initial permanent installation of equipment, adding doors, windows, for functional reasons is construction. However, in case of conversions, repair work to the facility which would have been done regardless of its functional use and irrespective of the conversion project, is classified as repair.

(e) *Example E.* Addition of insulation for energy conservation when such work is not related to a repair project. (See para 2-2 b(1), example E.)

(f) *Example F.* The addition of a suspended ceiling where there was no ceiling before is construction.

(g) *Example G.* The installation of additional doors and windows or the increase in linear feet of partitions in case of major replacement of components in connection with the restoration of a generally deteriorated building is construction.

(2) Roads and Railroads:

(a) *Example A.* Work which will increase the base data of surfaced areas (widening, extending and enlarging) is construction; except, however, an increase in road, street or bridge lane width to meet current minimum standards if accomplished incidental to major repair of the existing facility, is properly classified as repair.

(b) *Example B.* Installation of additional appurtenances, such as drainage structures, curbs, and combination curb and gutters is construction, except as follows: concrete curb and gutters which are added incidental to major street and parking lot repair are classified as repair to existing pavement edges and shoulders. Any extensions to storm drainage systems to accommodate the curbs and gutters is classified as construction.

(c) *Example C.* Asphaltic concrete surfacing of a stabilized or surface treatment pavement.

(d) *Example D.* Reconstruction of trackage to higher standards to meet new missions.

(e) *Example E.* Extension of trackage.

(f) *Example F.* Replacing inadequately sized drainage lines and structures with larger sizes to meet capacity of a new mission requirement.

2-3. Work Classification — Grounds

This section contains examples of work classification for maintenance, repair and construction in the grounds area. (Note that replacement or additional landscape planting must be in accordance with the installation's approved Natural Resources Management Plan).

a. Maintenance.

(1) *Example A.* Grass cutting.

(2) *Example B.* Periodic cutting back of brush under powerlines or from edges of roads.

(3) *Example C.* Application of fertilizer and weed/pest control agents on improved grounds.

(4) *Example D.* Periodically scheduled lime, fertilizer, and seed application to maintain good growth on undamaged, vegetated waterways and other areas where vegetation has been previously established. This excludes prescribed follow-up treatments outlined as performance standards for initial establishment of vegetation associated with construction or repair projects.

(5) *Example E.* Periodic inspection of erosion control structures.

(6) *Example F.* Periodic removal of sediment from sediment barriers and catchments.

(7) *Example G.* Removal of debris from an erosion control structure inlet to prevent damage or failure.

(8) *Example H.* Controlling trees and vegetation to prevent subsurface drainage systems from clogging.

(9) *Example I.* Removal of sediment from erosion control structures, barriers or catchments and from constructed ranges and other real property facilities.

(10) *Example J.* Removal of sediment from inundated areas not designed as real property facilities or as constructed sediment barriers or catchments.

b. Repair.

(1) *Example A.* Replacement of dead, deteriorated or overgrown landscape planting is repair. Replacement does not have to be on a "one for one" or "same species" basis, however, the location and size of the area landscaped and the objective of the planting (for example, foundation planting, screen) must be the same.

(2) *Example B.* Replacement of dead or deteriorated turf by seeding or sodding is repair.

(3) *Example C.* Replacement of damaged trees, shrubs and turf.

(4) *Example D.* Work required to eliminate erosion such as filling and shaping to correct gullies, rills and sheet erosion on training lands or real property facilities to reduce soil loss, to restore the natural shape of the land or land-formed facility, or to prevent further damage is repair.

(5) *Example E.* Repair of sediment barriers and catchments excluding sediment removal.

(6) *Example F.* Root removal and replacement of damaged subsurface drainage systems where failure has occurred (e.g., water backup, out-of-pipe flow) is repair.

(7) *Example G.* Erosion control measures such as the placement of rip-rap, gabion structures or small check dams to prevent or contain erosion is repair.

c. Construction.

(1) *Example A.* Additional landscaping around family quarters and other real property facilities.

(2) *Example B.* Providing a drainage ditch to carry surface runoff where no ditch previously existed.

(3) *Example C.* Extending subsurface or surface drainage systems to include additional drainage area.

(4) *Example D.* Creation of a sediment retention structure (i.e., basin, pond) by means of excavation and/or erection of a dam where no structure previously existed.

(5) *Example E.* Creation of an erosion control structure for grade control and channel lining where no previously constructed erosion control structure existed is construction.

2-4. Work Classification — Utilities

This section contains examples of work classification for maintenance, repair and construction in the utilities area.

a. Maintenance.

(1) *Example A.* Periodic replacement of filters, belts, and brushes in heating, pumping, ventilation, air conditioning and refrigeration systems.

(2) *Example B.* Lubrication of pumps, motors and shaft bearings.

(3) *Example C.* Adjustment of controls in elevators and HVAC systems.

(4) *Example D.* Replacing oil in self cooled transformers.

(5) *Example E.* Relamping.

(6) *Example F.* Fire flow testing and flushing of water and sewer lines.

(7) *Example G.* Flushing and cleaning of boilers.

(8) *Example H.* Checking continuity of electrical grounding systems.

b. Repair.

(1) *Example A.* Replacement of failed or failing lighting fixtures with fixtures which provide the correct level of illumination prescribed by current Army standards or codes.

(2) *Example B.* Replacement of serviceable lighting fixtures is repair when the ceiling is being replaced as repair, and when a different type fixture is dictated by the replacement ceiling.

(3) *Example C.* Replacement of failed or failing overhead electrical distribution system components such as distribution lines, poles, insulators, or lightning arrestors with an underground distribution system to conform to the Installation Design Guide or the National Electric Code.

(4) *Example D.* Replacement of a serviceable 110 volt circuit with a 220 volt circuit when a failed 110 volt window air-conditioning unit is being replaced as repair with a 220 volt unit.

(5) *Example E.* Replacement of a corroded pipe that is failed or failing with a pipe having higher corrosion resistance.

(6) *Example F.* Replacement of a failed or failing manual control system with an automatic state of the art control system.

(7) *Example G.* Replacement of a failed or failing water or sewer line with a line in a new location to serve the same system for continuation of service during project execution.

(8) *Example H.* Replacement of a failed or failing warm air furnace or boiler with a furnace or boiler using the same or different fuel. (Note: Fuel conversions require life cycle cost type justification. See AR 420-49). All piping in the building to the five-foot line, controls, electric wiring and fuel storage specifically required for replacement is repair.

(9) *Example I.* Replacement of failed or failing installed space heaters with a central heating system.

(10) *Example J.* The cost of removal and replacement of failed or failing food service equipment. (Note: The actual cost of the equipment itself is not funded from RPMA i.e., J, K, L, or M accounts.) Failed or failing food service equipment need not be replaced in the same location and they may be rearranged to meet new DA approved layouts, as repair.

(11) *Example K.* Replacement of failed or failing trough urinals with an adequate number of wall-mounted urinals.

(12) *Example L.* Replacement of a multiplicity of failed or failing installed air-conditioning units with a central system including duct

work, piping, and wiring is repair provided that the air-conditioned space is not increased. (Note: For work to be classified as repair, existing air-conditioning units must be installed real property; not occupant-owned or equipment-in-place units.)

(13) *Example M.* Replacement of failed or failing wall mounted or free standing drinking fountains.

(14) *Example N.* Replacement of a failed or failing air-cooled condenser with a water-cooled condenser, or replacement of a failed or failing water-cooled condenser with an air-cooled condenser.

(15) *Example O.* Replacement of a failed or failing single bowl kitchen sink with a double kitchen sink.

(16) *Example P.* Replacement of twin sinks in a bathroom, when only one needs replacement and a matching sink is not available.

(17) *Example Q.* The replacement of a heating system that is failed or failing with a heat pump will be part repair (for heating) and part construction (for air-conditioning) if air-conditioning does not exist. Any sound engineering method of establishing repair and construction allocation of project costs may be used.

(18) *Example R.* If a multiplicity of failed or failing heating plants or systems are replaced with a consolidated plant (equal or less capacity) and distribution system, both the replacement plant and distribution system are repair. The individual building heat transfer equipment requirements (mechanical room) which replaces the failed or failing building heat source are also repair. Replacement of the individual building heating system, in conjunction with "consolidation," in order to accommodate the new system, can either be repair or construction depending on the condition of the existing system and must stand on its own merit concerning appropriate work classification. Providing a building to house the replacement system is construction. The replacement distribution system may be overhead, shallow trench or direct buried. Replacing existing manholes is repair if the system is relocated to follow a different route than that of the existing system.

(19) *Example S.* An existing plant may be expanded to accommodate the capacity of the failed or failing systems as repair, or a new plant may be constructed. In these cases, the replacement heating equipment is repair; the new building housing the equipment is construction.

(20) *Example T.* Failed and failing storm water systems that are overloaded may be increased in capacity to meet existing flows. In addition, if required by appropriate regulatory authority, the system may be upgraded to current standards to include retention basins.

(21) *Example U.* Replacement of a failed or failing heat distribution or chilled water distribution with a new system in a new location to serve the same facilities is repair.

(22) *Example V.* Replacement of a failed or failing direct buried system with a shallow trench or overhead system is repair.

c. Construction.

(1) *Example A.* Additions or expansions of existing serviceable utility distribution and collection systems, i.e., overhead and underground electric distribution systems, steam, hot water, and gas distributions systems, water mains and services, sewer mains and laterals.

(2) *Example B.* Altering unit arrangement and/or making changes to existing serviceable utility plants and systems to accomplish increases in capacity or efficiency or to accommodate new or changed operational requirements.

(3) *Example C.* A fuel conversion on a serviceable furnace, boiler, or water heater, unless the existing equipment is obsolete.

(4) *Example D.* Installation of new installed building equipment or systems, such as, kitchen equipment, space heating, water heaters, or plumbing systems.

(5) *Example E.* Installation of any previously removed installed building equipment where such equipment was removed to accommodate a new use.

(6) *Example F.* The interconnection of two serviceable heating plants to eliminate the operation of one heating plant.

(7) *Example G.* The installation of fuel oil storage tank at a gas fired heating plant to permit gas/oil operation.

(8) *Example H.* The installation of a new humidifier in a warm air heating system.

(9) *Example I.* The installation of any size air-conditioning equipment and mechanical ventilation equipment in any facility is construction except when air-conditioning is classified as equipment-in-place.

(10) *Example J.* The alteration of any serviceable air-conditioning or ventilation system to improve or increase operating characteristics.

(11) *Example K.* The addition of secondary or advanced treatment to a primary sewage treatment plant.

(12) *Example L.* The installation of new water pumps or wells to meet new loads.

(13) *Example M.* Connection charges to utility companies for the connection of new or expanded facilities, or capital contributions to the utility suppliers' "backbone" system, see AR 420-41.

2-5. Work Classification — Landfills

a. General Background.

(1) In accordance with AR 420-47 it is the Army policy to use municipal utility systems in lieu of Army landfills when the cost of municipal systems is no more than 125 percent of the Army cost. Projects that are estimated to cost over 125 percent should be referred through MACOMs to USACPW (CECPW-EP) for exception to policy approval at HQDA. Therefore the preferred method of solid waste management at an Army installation is to participate in a regional solid waste disposal system, if feasible.

(2) In the absence of a regional system, contractual arrangements for solid waste collection, hauling and disposal should be made with a public agency or a commercial entity. New landfills on Army installations will be planned only when studies (including third party contracting) show that these services are not economically available from outside sources.

(3) If corrective actions are required on closed landfills because of environmental contamination, funds may be eligible for programming under the Defense Environmental Restoration Program as Solid Waste Management Unit (SWMU) projects. This Defense Environmental Restoration Account (DERA) funding mechanism is for CONUS facilities only. OCONUS installations must use environmental compliance funds or Host Nation Infrastructure Funding as appropriate.

b. Operations.

(1) Operation of existing landfills is not construction and is considered an operating fund expense, e.g. RPMA M-Account. This includes costs of opening new cells to include cell liner and cell leachate collection systems, the day-to-day operations of placing refuse, compacting, daily and final cover, closure and erosion control.

(2) Operation of closed landfills to include the operation of an existing leachate collection and treatment systems are engineering support efforts, RPMA-M account should be utilized.

c. *Repairs.* If a landfill, either existing or closed, is determined to be a failed or failing system, e.g., confirmed ground or surface water contamination, repair funds, i.e., RPMA-K Account or appropriate environmental compliance account, should be utilized for the facility correction such as liner or leachate collection system repairs. However, DERA is the preferred funding mechanism to correct a failed or failing system on a closed landfill in CONUS.

d. Construction.

(1) All new landfills are construction efforts and will be programmed as construction projects. Military Construction (MILCON), RPMA L-account or appropriate environmental compliance account should be utilized. All preparatory work for the overall site footprint will be included in the construction project. This includes site development, leachate collection, pumping stations, treatment facilities, scales, fencing, monitoring wells, haul roads, storm water drainage control.

(2) Improvements, e.g., leachate collection, treatment facilities, fencing, monitoring wells, required on the original overall footprint after project completion are classified as construction, utilizing MILCON, RPMA L-account or environmental compliance account as appropriate.

(3) If additional construction, e.g., installation or extension of liners and additional leachate collection or treatment systems, at an existing landfill is required solely to meet new Federal or State regulations and there is no sign of ground or surface water contamination, the work is a construction effort and appropriate environmental compliance funds under either MILCON or O&M Account should be utilized.

2-6. Work Classification — Asbestos

a. Repair.

(1) If asbestos containing material (ACM) is in a failed or failing condition, abatement work is considered repair.

(2) If ACM is not failed or failing by itself but is removed in connection with repairs to failed or failing building components or systems, the asbestos abatement is considered an integral part of the repair project and is therefore repair.

b. Construction.

(1) If ACM is not failed or failing but is removed in connection with alteration or construction work, the asbestos abatement is an integral part of the construction project and is therefore construction.

(2) If ACM is not failed or failing but is removed anyway as a matter of policy, such abatement work is construction.

c. Service.

(1) If ACM is contained in a facility which is scheduled to be demolished, not as part of a construction project, but as part of the installation master plan, asbestos abatement is not considered construction and should be funded with demolition funds e.g., OMA M-Account.

(2) Surveys for the identification and inventorying of ACM is nonconstruction and the environmental compliance, air quality account should be used.

2-7. Work Classification — Defense Environmental Restoration Program (DERP)

a. The following summarizes Army policy governing the classification of work for projects performed under the Defense Environmental Restoration Program (DERP) at active installations.

b. DERA was established to carry out the functions of the Secretary of Defense relating to environmental restoration. The requirements applicable to this program were addressed in the Superfund Amendments and Reauthorization Act (10 USC 2701 et seq) which amended the Comprehensive Environmental Response, Compensation and Liability Act (42 USC 9601 et seq). DERA funds are provided to the DOD in the Environmental Restoration, Defense transfer account. Amounts in the transfer account are available to be transferred to any appropriation account or fund of the department for obligation. Once transferred, funds are merged with and are available for the same purposes and for the same period as the account or fund to which transferred. This means that if the DPW determines that maintenance and repair type of work needs to be done, then the DERA funds are placed into the installation's operating program. If the funds are for work that would normally be done as an MCA project then the funds can be transferred to the MCA account, see AR 200-1.

c. The following procedures and guidelines will be employed to ensure that the proper appropriation is identified in the Army request for transfers. This section also contains examples of work classification for typical projects accomplished under the DERA program. Proper work classification of projects prior to the beginning of the fiscal year in which the project is to be executed is critical. Improper work classification may result in project delays.

(1) General.

(a) The basic work classification guidance contained in this document, and AR 420-10 and AR 415-35 apply to DERP projects.

(b) The installation accountable for the real property needing DERP projects must be involved in the work classification selection.

(c) Work done that results in the creation of a real property facility (temporary or permanent) is construction (OMA or MCA).

(d) The work classification for DERP projects must be accomplished in accordance with current public laws and Army guidance.

(e) Operational expenses for DERP projects are OMA expenses or appropriate mission accounts.

(2) *Maintenance.*

(a) Cleaning drainage structures and lagoons is maintenance.

(b) Cleaning contaminated sanitary and/or storm sewer lines is maintenance.

(3) *Repair.*

(a) Work necessary to restore damaged real property facilities, sanitary and/or storm drainage systems, lagoons and disposal pits is repair.

(b) Replacement of failed or failing underground storage tanks with above or below ground storage tanks is repair.

(c) Reforestation and reestablishment of ground cover destroyed by contamination is repair.

(4) *Construction.*

(a) All work pertaining to the addition, expansion, extension or alteration of real property facilities or systems is construction.

(b) Installation of monitoring wells is construction.

(c) Construction of alternative water supply systems is construction.

(d) Expansion of existing water supply systems is construction.

(e) Installation of a groundwater collection and/or treatment systems is construction.

(f) Construction of treatment facilities such as incinerators, materials handling or storage facilities, roads, fences, utilities systems or extensions of utilities systems, is construction.

(5) Services, studies and investigations are properly chargeable to the OMA account, i.e., M-account or environmental compliance accounts. These include:

(a) The cleanup of a contaminated water supply for non-Army facilities by a third party contract.

(b) The services of a contractor to remove, incinerate, or demolish contaminated real property or systems.

(c) The services of a contractor to perform groundwater treatment.

(d) Studies and investigations.

(e) The installation of test wells that are used for detecting the location and extent of groundwater contamination.

(6) Demolition and removal without replacement is properly chargeable to the OMA account i.e., M-account or ECAP account. These include:

(a) Demolition and removal of contaminated structures.

(b) Excavation and removal of contaminated soil.

(c) The removal of underground storage tanks (UST's).

(d) The removal of underground contaminated utility systems.

(e) The removal of unexploded ordnance.

2-8. Work Classification – Equipment Classification

a. *Installed Building Equipment (IBE).* Installed building equipment (real property) are items that are affixed or built into the facility and become an integral part of the facility. IBE is normally provided as a part of the construction contract and their costs are included as a funded construction cost. Maintenance and repair of IBE follows the classification guidance contained in paragraphs 2-2 through 2-7. Examples of supporting equipment that are considered IBE are listed below:

Antennas (master antennas for TV systems).

Benches (built-in).

Boilers.

Bookcases (built-in).

Cabinets (built-in).

Carpet (Primary Floor Covering).

Chapel seating, pulpits, and communion rail.

Closets.

Desks and tables (built-in).

Dishwasher equipment (built-in).

Drinking water coolers.

Electrical (electric fixtures and power equipment).

Elevators and elevator doors.

Escalators.

Exhaust systems.

Fire alarm systems.

Food service equipment (built-in).

Gas fittings.

Generators.

Hardware and fixtures for handicapped.

Heating, ventilating and air conditioning.

Hoists (crane and crane rails).

Incinerators.

Information systems (major construction projects).

Intercom systems.

Jail equipment.

Key Control systems.

Laboratory sinks, tables, benches (built-in).

Lockers (built-in).

Meatcutting equipment.

Medical gas systems.

Nurse call system.

Paging system.

Panel boards.

Plumbing.

Pneumatic tube systems.

Pot and pan washing equipment.

Protective construction features.

Refrigeration equipment (built-in).

Storm sash and doors.

Safety signs.

Screens.

Shelving and racks (built-in).

Signs and markings for boundary, area, building room, and unit identification.

Sprinklers.

Sterilizers (built-in).

Storage bins (built-in).

Theater and auditorium railings.

Theater stage and fire curtain.

Traffic railings.

Vaults.

Vehicle and pedestrian traffic control and signs.

Venetian blinds and window shades.

Wardrobes (fixed).

Waste disposers.

Other similar nonseverable items.

b. *Personal Property (Fixed).* Personal property consists of capital equipment and other equipment of a movable nature which has been fixed in place or attached to real property, but which may be severed or removed from buildings without structural damage. The acquisition and installation of personal property is an unfunded project cost. Personal property is accounted for in accordance with AR 710-2. Examples of personal property are listed below.

Antennas and antenna towers for point-to-point communications.

Blanking equipment.

Blast furnaces.

Blasters and roto blasters.

Chain and tractor equipment.

Conveyor systems.

Demountable Partitions
Dies.
Drills.
Dryers.
Educational television systems.
Electronic repair laboratory and shop equipment.
Electronic navigational aids, such as TVOR and TACAN.
Fixed facilities for radio and meteorological stations.
Fixed target range systems.
Forges.
Grinders.
Heat treating machines.
Intrusion detection systems.
Jigs.
Lathes.
Laundry equipment.
Medical and dental equipment.
Metal plating equipment.
Microscopes (fixed).
Molders.
Organs.
Ovens and furnaces.
Paint sprayers.
Photographic equipment.
Planners.
Presses.
Prewired Workstations.
Printing presses and related equipment.
Punches.
Riveters.
Scientific measuring instruments.
Sewing machines.
Sheet metal equipment.
Stamping and cleaning equipment.
Steam cleaning equipment.
Still.
Stitchers.
Telescopes.
Testing equipment.
Training equipment and simulators.
Vats.
Wash tanks.
Welding machines.
Woodworking equipment.

c. Personal Property (Movable). Equipment that is movable and not affixed as an integral part of the facility is generally accounted for as personal property rather than real property. Examples of movable personal property are listed below.

Automated data processing equipment.
Dental chairs and pedestal units.
Filing cabinets and portable safes.
Food service equipment (portable).
Furnishings, including rugs.
Furniture.
Office machines.
Photographic equipment (portable).
Shop Equipment.
Training aids and equipment, including simulators.
Wall clocks.

d. Costs. Costs associated with installing equipment that is movable and not affixed as an integral part of existing real property facilities is "not construction" and will not be funded as a construction cost. The cost of this equipment and the costs related to its procurement (including items such as transportation, packing, unpacking, assembly, and attachment) are not construction and are funded from the owning property book holder with the same appropriation that bought the equipment when the installation is in an existing building or facility. Some typical examples are as follows:

(1) Installation and relocation of prefabricated interior screens, partitions, and dividers that are mainly unattached. Movable screens or detachable panels that are temporarily held in place by light braces and screws and are readily removed without impairing or defacing either the panels or the floors, walls, or ceilings of the structure.

(2) Installation of false floors and platforms required solely for operating equipment to be installed.

(3) Installation of required shielding for electromagnetic radiating devices. Structural changes, including new partitions related to installing shielding, are construction.

(4) The temporary removal and reinstallation of items such as portions of walls, roof, and utility systems to permit the installation of equipment. Reinstallation may involve rerouting or relocation of some items.

(5) Installation of special foundations, pads on slab-on-grade, or pits in facilities. Installation of floors other than slab-on-grade are limited to bases needed to spread load and to secure equipment in place. Increase in load bearing capacity of these floors by additional or larger structural components is construction.

(6) Installation of dedicated secondary utility work to connect the equipment to utility services within a facility. This work lies between the utilities primary entry or source within the structure and the equipment to be served, for example, utility work from the existing main electrical service panel, or for equipment requiring primary voltage, from the building primary bus.

(7) Installation of air conditioning under the following circumstances:

(a) To meet manufacturers' specifications for equipment temperature, humidity, particulate matter, and air circulation.

(b) In clean rooms installed in non-air-conditioned spaces or when the building central system cannot meet the temperature and humidity requirements of the clean room operations.

(c) For operator occupied areas where installed equipment will increase the temperature or humidity beyond safety levels in the immediate area of equipment. Under this policy, air conditioning may be provided only in bona fide equipment spaces directly related to the equipment and not in administrative or other working spaces.

(8) Installation of mechanical ventilation and separate exhaust systems when needed for personnel safety or for the proper functioning of the equipment as required by the manufacturer.

(9) Installation of intrusion detection equipment, except for conduit and junction boxes.

(10) Installation of specialty fire extinguishing systems for rooms that contain substantial amounts of automatic data processing (ADP) equipment.

(11) When installed in new facilities, items listed in d(3), (6), (7), (8), and (10) above are construction. Related costs are properly chargeable to a construction project as a funded cost.

e. Other Procurement Army (OPA) Funded Construction (Equipment Shelter Exception to Policy). Prefabricated equipment shelters may be constructed either with OPA funds or OMA/MCA funds. OPA funded equipment shelters and support facilities/systems are classified as real property and maintained by the Directors of Public Works (DPWs), provided the OPA funded shelters and support facilities/systems are constructed in accordance with the following policy:

(1) All equipment shelters, facilities/systems, regardless of the

source of funding or construction agency, will be built to Corps of Engineers' standards.

(2) Master planning will be performed, and site approval obtained from the servicing DPW.

(3) Final design approval will be obtained from the servicing DPW prior to awarding a construction contract.

(4) Construction management will be accomplished by the DPW or District Engineer at the discretion of the servicing DPW.

(5) Transfer of construction to the DPW's real property records will be in accordance with the procedures outlined in AR 420-17.

(6) The purchase, installation, maintenance and repair of communications equipment (personal property) continues to be the responsibility of the tenant, and where DPW services are required and available, must be accomplished on a reimbursable basis.

f. Automatic Box Conveyor System. Automatic Box Conveyor (ABC) System can best be described as a state of the art transportation system for records and other small items. They are now routinely being installed at Army hospitals. The ABC system consists of two parts:

(1) An installed track system, including switches and controls, normally designed to fit a particular facility and integrated into the building's fire protection and mechanical systems. If removed, the system is impossible to reuse without major modifications.

(2) Conveyor carts and containers that can be removed from the conveyor track system.

(3) The ABC system will be accounted for and subsequently maintained and repaired as follows:

(a) The track structure and control systems will be treated as real property (Installed Building Equipment) and maintained and repaired by the engineer.

(b) The conveyor carts and containers will be treated as personal property and the maintenance and repair will be accomplished by or reimbursed from the user.

g. Prefabricated Office Modules. The purchase and installation of modular units with equipment funds as personal property is permissible provided the equipment is:

(1) Owned and accounted for by the user.

(2) Maintained and repaired with user's operating funds.

(3) Made for indoor use only.

(4) Movable or if attached to the real property, can be severed or removed without destroying the usefulness of the building or the office module.

h. High Altitude Electromagnetic Pulse (HEMP). The DPW has the responsibility for programming and performing maintenance and repair functions for HEMP hardened facility features where those features are classified as installed building equipment. However, the DPW is not responsible for the maintenance and repair of such features when they are classified as personal property. When classified as personal property, the responsibilities outlined above belong with the installation's Director of Information Management, the user, or the occupant of the facility. This work may be done by the DPW on a reimbursable basis.

i. Uninterruptible Power Supply (UPS) System. An UPS system, depending upon the type, size, and installation, may be classified as either IBE or EIP. To assist you in your classification the following guidance is offered:

(1) An UPS system which occupies a specific area of a building and is structurally, mechanically and electrically affixed as an integral part of that facility is classified as real property and the system should be operated, maintained, and repaired by the DPW.

(2) An UPS system which requires no structural changes and is not affixed or built into a facility and which can be moved and relocated without destroying the usefulness of the facility is classified as personal property and is operated, maintained, and repaired by the user.

Chapter 3 Project Documentation

3-1. General

a. The above examples outline the reasoning on which similar or related decisions can be supported. It is the responsibility of the facility engineer to support decisions with adequate records. The project file should contain dated documents with memoranda to support the basis of each judgment decision. Care should always be taken in use of language. If a worn-out sink is being replaced, the work order should so indicate. It should not state, "Install sink in mess hall #1." The word "install" implies new work (construction).

b. The words "upgrade," "renovate" and "rehabilitate" are misleading and generally imply construction; eliminate this terminology in justifying repair projects. Also, state whether the work is repair or replacement, not both. The best policy on any project is to spell-out as much detail as is necessary to provide a logical account of the project's history.

c. Recent Army Audit Agency audits have criticized DPW's where the record was not clear that various components were failed or failing and in need of repair. A clear description that will provide an audit trail is necessary. The use of photographs to support the record is recommended.

d. While projects are in progress or near completion, the facility engineer is responsible for exercising control over costs to insure that the project limitations are not exceeded. The engineer will use the appropriate Integrated Facilities System (IFS) reports to monitor the project (e.g., Special Projects Report), and under IFS-M will use information obtained from the Job Cost Accounting system. Project costs are entered and accumulated daily and should be tracked closely at some point near the approval limitation, normally 80 percent. The percentage depends upon the size of the project in dollars and the amount of costs being incurred daily. See table 3-1 for an example of a blotter record when costs are not automated.

e. If it appears that the local approval authority will be exceeded, an immediate request for approval with supporting documentation will be forwarded to a higher authority. The work should be halted to prevent exceeding the approved cost limitation. If project costs are being kept manually, it is imperative that costs be reported at regular intervals, daily or weekly, depending on the established threshold limitation. Under IFS, cost generating elements (labor, supplies, equipment) are automatically identified with a particular project, but with manual records these elements must be identified and reliable means of capturing their costs must be established.

3-2. Establishment of Official Project Files

a. The project file is a complete historical record of the project from inception to completion. Correspondence and other documentation pertinent to the project will be included in the project files at all appropriate levels. This will include work requests, project approval documents, inspection reports and memoranda for record pertaining to decisions resulting from discussions, meetings, and telephone conversations.

b. A project folder will be established by the DPW for each real property facility project costing over \$15,000.

c. For single undertakings involving both construction and maintenance and repair, only one project folder will be established.

d. Each folder will represent a complete historical record of a project, from inception to filing of the actual costs incurred. It must be located in one place to facilitate review and inspection.

e. As a minimum, the project file should contain the following documentation for each project:

(1) For maintenance, repair, and construction projects:

(a) Initial estimate, identification of estimator, justification for the project, and related correspondence.

(b) Requests for approval to higher authority when applicable.

(c) Signed approval documents from higher authority to include letters, estimates, specifications and plans, and approved DD Form 1391 as applicable.

(d) Sets of revised plans and estimates, if changes to these documents were required by the approving authority.

(e) DA Form 4283 (Facilities Engineer Work Order Request) with supporting DA Form 4284 (Facilities Engineer Work Order) and an auditable list of materials, such as the printed list of issues from the FESS software. The folder may contain more than one work order if it is desired to control each classification of work.

(f) Job phase calculation sheets and other documentation used in estimating the project, to include identification of funded and unfunded costs, estimated total costs, calculations to show how costs were developed, identification of crafts involved, and source documents used for the estimates.

(g) On projects approaching regulatory or statutory limitations, a day-to-day blotter record showing all actual costs incurred to date. Maintenance and analysis of this day-to-day blotter record should preclude the potential violation of the Anti-Deficiency Act.

(2) In addition to the above requirements, folders for construction type projects should also include:

(a) A document signed by the requesting agency indicating when the need for the project became known, when the work must be completed, and what the consequences would be if the project were not completed by the specified time.

(b) A notation that the Inventory of Military Real Property has been changed to include the sum of all the recordable facilities engineering costs of the project.

(c) A notation that the Installation Master Plan has been amended and approved by the MACOM in accordance with AR 210-20.

(3) Other documentation required by AR 415-35 or deemed pertinent to the history of the project should also be included.

3-3. Integrated Undertaking

When construction and maintenance and/or repair are accomplished simultaneously as an integral undertaking, the construction should be treated as a separate project, and engineering estimates will be used to prorate costs applicable to the construction portion.

3-4. Facility Replacement Value

a. One critical element requiring careful analysis on all maintenance and repair projects is the determination of the percentage of total repair cost or repair plus alteration cost for a combined undertaking to the replacement value for a new facility. The replacement value of the affected facility generally being used is for a facility of

the same type (permanent, semipermanent, or temporary) and identical size i.e., same square footage at current construction standards and unit costs contained in AR 415-17, with applicable adjustments. This cost comparison is to be used to determine whether the project exceeds 50 percent of the replacement value and must be submitted to DA for approval, in accordance with AR 420-10. Note, that in determining replacement value, costs of demolition, asbestos removal, site work, and historical considerations may be included if applicable.

b. AR 415-17 provides guidance and procedures for computing the replacement facility value. The following supplementation guidance is provided for use in conjunction with AR 415-17 to ensure a uniform application when computing the replacement facility cost estimate.

(1) The replacement facility must be of the same square footage at current construction standards. However, if current limitations dictate otherwise (such as occurs with the oversized family housing units), the replacement value must be based on the current authorized square footage. The primary facility cost will be extracted from Pax newsletter 3.2.2, FYXX Unit Cost Value Guidance.

(2) Support Cost will be based on the existing conditions at the site. Site cost can include utility work, paving, landscaping, clearing and site preparation and any other work which is done outside the building's five foot line.

(3) The use of standard SIOH and Contingency factors should be added.

(4) Additional cost may be added for demolition and environmental restoration related to the siting of the project and any historical documentation cost.

(5) Additional cost may also be added for temporary accommodations during construction.

(6) By definition, the replacement value of a WWII Wood Temporary Building is \$40/SF and 50 percent is \$20/SF.

3-5. Safeguarding Information

All documents reflecting detailed cost of work estimates (as opposed to engineering appraisals) of a project, prior to contract award, must be initially marked "FOR OFFICIAL USE ONLY." When the symbol no longer applies, it must be removed.

**Table 3-1
Blotter Record**

Date	Item	Funded	Unfunded	Total Funded	Total Unfunded
Summary				\$230,000	\$20,000
Nov 3-7	Plumbing Labor	\$800		\$230,800	
Nov 5	Supplies	\$500		\$231,300	
Nov 14	Military Labor		\$2,400		\$22,400
Nov 14	Equipment Rental	\$1,100		\$232,400	
Nov 14	Equipment Depr.		\$300		\$22,700

Notes:

1. PROJECT: Alteration of Building 1928.

2. APPROVED AMOUNT: Funded Cost \$250,000; Unfunded Cost \$50,000.

Appendix A References

Section I Required Publications

AR 37-1

Army Accounting and Fund Control. (Cited in para 1-5a.)

AR 200-1

Environmental Protection and Enhancement. (Cited in para 2-7b.)

AR 200-2

Environmental Effects of Army Actions. (Cited in para 1-7n(7).)

AR 210-20

Master Planning for Army Installations. (Cited in para 3-2e(2)(c).)

AR 210-50

Family Housing Management. (Cited in paras 1-4 and 1-7.)

AR 215-1

Administration of Army Morale, Welfare, and Recreation Activities and Nonappropriated Fund Instrumentalities. (Cited in para 1-7n(6).)

AR 415-15

Military Construction Army (MCA) Program Development. (Cited in paras 1-7n(7) and 1-7n(11).)

AR 415-17

Cost Estimating for Military Programming. (Cited in paras 3-4a and 3-4b)

AR 415-28

Department of the Army Facility Classes and Construction Categories. (Cited in para 1-7j.)

AR 415-35

Minor Construction, Emergency Construction, and replacement of Facilities Damaged or Destroyed. (Cited in paras 1-4, 1-5a, 1-7, 1-7b, 1-7(n)(11), 2-7c(1)(a), and 3-2e(3).)

AR 420-10

Management of Installation Directorates of Engineering and Housing. (Cited in paras 1-1, 1-4, 1-7, 1-7b, 1-7c, 2-7c(1)(a), and 3-4a.)

AR 420-18

Facilities Engineering Material/Equipment Management and Relocatable Buildings. (Cited in para 1-6c(6).)

AR 420-41

Acquisition and Sale of Utilities Services. (Cited in para 2-4c.)

AR 420-47

Solid and Hazardous Waste Management. (Cited in para 2-5a(1).)

AR 420-49

Heating, Energy selection, and Fuel Storage, Distribution, and Dispensing Systems. (Cited in para 2-4b.)

AR 420-72

Surface Areas, Bridges, Railroad, Track and Associated Appurtenances. (Cited in para 2-1.)

AR 570-4

Manpower Management. (Cited in para 1-4.)

AR 710-2

Inventory Management Supply Policy Below the Wholesale level. (Cited in para 2-8b.)

Section II Related Publications

AR 11-2

Internal Management Control

AR 11&nd

The Cost and Economic Analysis Program

AR 11-27

Army Energy Program

AR 37-60

Pricing for Materials and Services

AR 40-61

Medical Logistics Policy and Procedures

AR 71-13

The Department of the Army Equipment Authorization and Usage Program

AR 140-483

Army Reserve Land and Facilities Management

AR 210-13

General/Flag Officer's Quarters (GFOQ) and installation Commander's Quarters (ICQ) Management

AR 210-17

Inactivation of Installations

AR 420-17

Real Property and Resource Management

AR 420-22

Preventive maintenance and Self-Help Programs

AR 420-40

Historic Preservation

AR 420-43

Facilities Engineering Electrical Services

AR 420-46

Water Supply and Wastewater

AR 420-54

Air Conditioning, and Refrigeration

AR 420-70

Buildings and Structures

AR 420-74

Natural Resources; Land, Forest, Fish and Wildlife Management

AR 420-76

Pest Management

AR 420-81

Custodial Services

AR 420-90

Fire Protection

AR 735-5

Policies and Procedures for Property Accountability

DA PAM 415-3

Economic Analysis: Description and Methods

Section III

Prescribed Forms

This section contains no entries.

Section IV

Referenced Forms

DA Form 4283

Facilities Engineering Work Request

DA Form 4284

Facilities Engineering Work Order

Appendix B Tables

Table B-1

Steps in Development of a Project or Projects

STEP I—ESTABLISH PROJECTS BASED ON NEEDS

STEP II—CLASSIFY ALL WORK

Maintenance	AR 420-10
Repair	AR 420-10
Construction	AR 415-15
.....	AR 415-35
.....	AR 210-50

STEP III—DETERMINE FUNDED & UNFUNDED PROJECT COSTS

Cost Estimates	TN 420-10-1
Equipment-in-place	AR 735-5
.....	AR 420-18
.....	AR 415-15
.....	AR 40-61
Surplus materials	AR 37-60

STEP IV—FIND APPROVAL LEVEL (FUNDED COSTS)

Construction	AR 415-15
Minor Construction	AR 415-35
Maintenance or Repair	AR 420-10
Army Family Housing projects	AR 210-50

Table B-2

Outline of Work Classification

Existing Items or Component. (Buildings, road, roof shingles, electric lines, poles, sewer line, pipe, manhole, etc.)

a. Deteriorated by action of the elements or wear and tear in use.

(1) Work proposed will not result in substantial improvement or item or component improvement,

(a) Recurring type work to preserve or maintain Maintenance

(b) Overhaul, reprocessing, or replacement of Repair

deteriorated constituent parts (but not total facility replacement)

(c) Correction of conditions for nonconformance Repair

to Army standards when done for economy concurrently with and incidental to (b) above

(d) Correction of conditions for nonconformance Construction

to Army standards not done concurrently with

(b) above

(2) Work proposed will result in substantial im- Construction

provements of items or components in quality (i.e.

capacity, area etc.

(3) Work Proposed will completely replace a real Construction

property facility (a building, exterior heat distribu- tion system etc.)

b. Not deteriorated by action of elements or wear and tear in use.

Table B-2

Outline of Work Classification—Continued

(1) Work proposed will not change functional Construction

purposes

(2) Work proposed will change functional pur- Construction

pose (change of category code)

Glossary

Section I Abbreviations

AWP

Annual Work Plan

APF

Appropriated Funds

ACPW

Army Center for Public Works

AFH

Army Family Housing

AIF

Army Industrial Fund

AMSC

Army Management Structure Code

AR

Army Regulation

ACM

Asbestos Containing Material

ABC

Automated Box Conveyor

BMAR

Backlog of Maintenance and Repair

BRAC

Base Realignment and Closure

CONUS

Continental United States

DA

Department of the Army

DASA(I&H)

Deputy Assistant Secretary of the Army (Installations and Housing)

DBOF

Defense Business Operating Fund

DERP

Defense Environmental Restoration Program

DERA

Defense Environmental Restoration Account

DMAR

Deferred Maintenance and Repair

DOD

Department of Defense

DPW

Director/Directorate of Public Works

ECAP

Environmental Compliance Achievement Program

FY

Fiscal Year

HEMP

High Altitude Electromagnetic Pulse

IAW

In Accordance With

IBE

Installed Building Equipment

IFS

Integrated Facilities System

IPB

Installation Planning Board

M&R

Maintenance and Repair

MACOM

Major Army Command

MCA

Military Construction, Army

MCAR

Military Construction, Army Reserve

MEDMILCON

Medical Military Construction

MILCON

Military Construction

MMCA

Minor Military Construction, Army

MWR

Morale, Welfare, and Recreation

NAF

Nonappropriated Funds

NEPA

National Environmental Policy Act

NOV

Notice of Violation

O&M

Operations and Maintenance

OASA(I,L,&E)

Office of the Assistant Secretary of the Army for Installation, Logistics and Environment

OCE

Office of the Chief of Engineers

OMA

Operation and Maintenance, Army

OMAR

Operation and Maintenance, Army Reserve

OPA

Other Procurement, Army

OSD

Office of the Secretary of Defense

OCONUS

Outside the Continental United States

OMAR

Operation and Maintenance, Army Reserve

OMARNG

Operation and Maintenance, Army National Guard

PAA

Procurement Appropriation, Army

PCB

Polychlorinated Biphenyls

RDTE

Research, Development, Test, and Evaluation

RPF

Real Property Facility

RPMA

Real Property Maintenance Activity

RPM,D

Real Property Maintenance, Defense

SIOH

Supervision, Inspection and Overhead

SOFA

Status of Forces Agreement

SWMU

Solid Waste Management Unit

USACPW

United States Army Center for Public Works

UST

Underground Storage Tank

Section II Terms

Addition–expansion–extension

A change to a real property facility that adds to its overall external dimension.

Administrative Approval

The functional review of a project for activity coding, essentiality, priority, mission requirements, programming, and functional and concept validation. Includes authorization to accomplish the project with appropriate technical approval. Alteration. A change to interior or exterior facility arrangements to improve the use of the facility for its current purpose. This includes installed equipment made a part of the existing facility. Additions, expansions and extensions are not alterations.

Backlog of maintenance and repair (BMAR)

The end of the fiscal year measurement of maintenance and repair work which remains as a firm requirement, but, which, due to lack

of resources could not be obligated before fiscal year end. Maintenance and repair projects must have been included in the annual work plan during the fiscal year before they can become BMAR projects. BMAR is not a separate classification of work. Refer to AR 420-16 for further explanation. Deferred maintenance and repair (DMAR) has the same definition as for BMAR except as it applies to family housing (refer to AR 210-50).

Conversion

The work required to adjust interior arrangements or other physical characteristics of an existing facility or part thereof so that it may be used for a new purpose. This includes equipment installed in, and made a part of, the existing facility. A conversion always results in a change in facility category code.

Equipment-in-place.

Personal property consisting of capital equipment and other equipment of a movable nature which has been fixed in place or attached to real property, but which may be severed or removed from buildings without destroying the usefulness of the structures. It does not include installed building equipment, a building or structure. Equipment-in-place is an unfunded project cost. By itself, it is never a separate repair, maintenance, or construction project. See AR 210-50, AR 735-5 and AR 420-18.

Facility classes and construction category

A prescribed Army-wide classification of a military facility defined in terms of the functional character of the facility. (See AR 415-28.)

Funded project costs

All project costs are funded except those prescribed in the definition of unfunded below. The appropriation financing the project will be used to reimburse other appropriations for all funded project costs initially financed by those other appropriations. Funded project costs will include, but will not necessarily be limited to the following:

(a) All materials, supplies, and services applicable to the project, except as indicated in the unfunded definition provided below.

(b) All installed capital equipment items, except as indicated in the definition of unfunded below. Installed capital equipment includes installed building equipment (AR 735-5), but excludes equipment-in-place.

(c) The cost of installing equipment-in-place in newly constructed real property facilities (AR 415-15).

(d) Transportation costs applicable to materials, supplies, installed capital equipment and Government-owned installed equipment.

(e) Labor costs, including construction units composed of foreign nationals civilians but excluding U.S. military labor.

(f) That portion of installation overhead or support costs which can be identified as

representing additional costs which would not have been incurred, were it not for the project. See AR 210-50 on costs pertaining to family housing.

(g) Overhead costs charged by the Corps of Engineers and the Naval Facilities Engineering Command and other activities using an industrial or other revolving fund.

(h) Travel and per diem applicable to troop labor.

(i) Cost applicable to maintenance and operation of Government-owned equipment (including equipment organic to troop units) in accordance with the hourly rate prescribed by local conditions.

(j) Costs of supervision and inspection.

(k) Equipment or materials which are surplus from other Army projects or sources.

Incrementation

The splitting of a project into separate parts where—

(a) It is done solely to reduce costs below an approval threshold or the minor construction ceiling, or

(b) Each part is not in itself complete and usable, or

(c) The total project is not complete until all parts are complete.

Installation

A fixed location together with its land, buildings, structures, utilities and improvements controlled and used by Army elements.

Installed Building Equipment

Installed building equipment (real property) are items that are affixed or built into the facility and become an integral part of the facility.

Master plan

The master plan for an established installation is an integrated series of documents which presents in graphic, narrative and tabular form the present composition of the installation and the plan for its orderly and comprehensive development to perform its various missions in the most efficient and economical manner over a 20-year period. (See AR 210-20).

Real property facility

For work classification purposes, a separate and individual building, structure, utility system, or other real property improvement identifiable in the three-digit Category Code listed in AR 415-28. A real property facility will be assigned only one 3-digit category code based on the primary construction category code being used (See AR 415-28).

Relocation

A project for movement of a building or structure from one site to another. The item may be moved intact or disassembled and later reassembled. This includes connection of new utility lines and excludes relocation of

roads, pavements, or airstrips. Relocation of two or more facilities resulting in a single facility will be considered a single project.

Relocatable Buildings

A building designed for the specific purpose of being readily moved, erected, disassembled, stored, and reused without structural damage and a minimum of refurbishment. The term includes fully assembled, mobile (with axles) structures; fully assembled, stationary (with skids) structures; factory preassembled buildings; and modular offices, classrooms, and similar units to be used outdoors. Specifically excluded from this definition are building types and forms, provided as an integral part of a mobile equipment item, that are incidental portions of such equipment components, such as communication vans or trailers.

Temporary World War II buildings

All temporary wood buildings similar to those built for troop mobilization before, during and after WWII.

Unfunded project costs

These are restricted to the following:

(a) All costs financed from Military Personnel Appropriations.

(b) Costs applicable to the depreciation of Government-owned equipment in accordance with the hourly rates prescribed by local conditions. Exception: Depreciation cost of plant capital working funds (such as Civil Works revolving fund, Corps of Engineers) will be considered as funded cost.

(c) Materials, supplies, and items of installed capital-type equipment that have been obtained specifically for the project on a non-reimbursable basis, either as excess distributions from another Military Department or comparable Defense component or as excess distributions from other government agencies. Army owned materials, supplies, or items of installed capital-type equipment must be charged to construction projects as funded project costs. The value of such materials and items treated as funded or unfunded costs will be the same as the Federal Supply Catalog price, if available, or the estimated replacement value (AR 37-60).

(d) The value of real property items relocated within an installation (associated transportation and relocation costs are funded project costs.)

(e) Planning and design costs.

(f) All costs financed from nonappropriated funds.

(g) Costs for licenses, permits, and/or fees chargeable under State or local statutes or under status of forces agreements (SOFA), as applicable, when such charges are permitted in implementing the Clean Water Act, the Clean Air Act, or other federal environmental pollution abatement acts in the United States,

or for compliance with SOFA agreements outside the United States.

Section III

Special Abbreviations and Terms

This section contains no entries.

Index

This index is organized alphabetically by topic and by subtopic within topic. Topics and subtopics are identified by paragraph number.

Antidefficiency violation, 1–5c

Automatic Box Conveyor System, 2–8f

Complete and Usable, 1–7a(2)

Complete Replacement, 1–6b(5), 1–6c(2), and 1–7j

Component Replacement, 1–7h

Connection Charges, 2–4c, Example M

Construction:

Definition, 1–6c

Examples, 2–2c, 2–3c, 2–4c, 2–5d, 2–6b, and 2–7c(4)

Prohibitions, 1–7(n)

Cost Controls, 3–1d

Current Day Standards, 1–7i

Energy Savings Performance Contracting Guidance, 1–7m

Equipment Installation, 2–8d

Facility Replacement Value, 3–4

High Altitude Electromagnetic Pulse (HEMP), 2–8h

Incremental Construction, 1–7n(3)

Installed Building Equipment, 2–8a

Integrated Undertaking, 3–3

Maintenance:

Definition, 1–6a

Examples, 2–2a, 2–3a, 2–4a, and 2–7c(2)

Major Facility Restoration, 1–7k

Movable Personal Property, 2–8c

Nonappropriated Funds, 1–7n(6)

OPA Funded Equipment Shelters, 2–8e

Personal Property, 2–8b

Prefabricated Office Modules, 2–8g

Project:

Construction, 1–7n

Development, Appendix C

Files, 3–2

Limitations, 1–7n(9)

Maintenance, 1–7b

Repair, 1–7b

Real Property Facility, 1–7j

Repair:

Definition, 1–6b

Examples, 2–2b, 2–3b, 2–4b, 2–5c, 2–6a, and 2–7c(3)

Statutory Violations, 1–5 and 1–7n(5)

Technological obsolescence, 1–6b(2) and 1–7l

Uninterruptible Power Supply System, 2–8i

Work Classification:

Applications, 1–7

Asbestos, 2–6

Buildings and Roads, 2–2

Concepts, 1–4

Defense Environmental Restoration Program (DERP), 2–7

Definitions, 1–6

Equipment Classification, 2–8

Grounds, 2–3

Importance, 1–5

Landfills, 2–5

Outline, Appendix D

Utilities, 2–4

Unclassified

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